PROJECT: 23-1035 PLAN, DRY CREEK-HWY 12 FISH PASSAGE DESIGN

Sponsor: Tri-State Steelheaders Inc Program: Salmon State Projects Status: Application Submitted

Parties to the Agreement

PRIMARY SPONSOR

Tri-State Steelheaders Inc

Address PO Box 1375

City Walla Walla **State** WA **Zip** 99362

Org Type Non-Gov-Reg Fisheries Enhance Group

Vendor # SWV0015388-00

UBI 601169392

Date Org created

Org Notes

link to Organization profile

☐ Org data updated

SECONDARY SPONSORS

No records to display

MANAGING AGENCY

Recreation and Conservation Office

LEAD ENTITY

Snake River Salmon Rec Bd LE

QUESTIONS

#1: List project partners and their role and contribution to the project.

WSDOT - landowner and technical assistance
CTUIR- technical assistance
WDFW- technical assistance

External Systems

SPONSOR ASSIGNED INFO

Sponsor-Assigned Project Number

Sponsor-Assigned Regions

EXTERNAL SYSTEM REFERENCE

Source	Project Number	Submitter
HWS	23-1035	AFitzgerald

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Project Contacts

Contact Name Primary Org	Project Role	Work Phone	Work Email
Alice Rubin Rec. and Conserv. Office	Project Manager	(360) 867-8584	alice.rubin@rco.wa.gov
Morgan Morris Tri-State Steelheaders Inc	Project Contact	(509) 529-3543	morgan@tristatesteelheaders.com
Brian Burns Tri-State Steelheaders Inc	Alt Project Contact	(509) 529-3543	brian.burns@tristatesteelheaders.com
Ali Fitzgerald Snake River Salmon Rec Bd LE	Lead Entity Contact	(509) 382-4115	ali@snakeriverboard.org

Worksites & Properties

#	Worksite Name
#1	Dry Creek at Highway 12

Planning	Property Name
✓	Karin Cagle

Worksite Map & Description

Worksite #1: Dry Creek at Highway 12

WORKSITE ADDRESS

Street Address HW 12
City, State, Zip Dixie WA 99362

Worksite Details

Worksite #1: Dry Creek at Highway 12

SITE ACCESS DIRECTIONS

Highway 12 in Dixie crossing between Petty Bone Rd and Cochran Rd

TARGETED ESU SPECIES

Species by ESU	Egg Present	Juvenile Present	Adult Present	Population Trend
Steelhead-Middle Columbia River, Walla Walla River, Threatened		✓	✓	Declining

Reference or source used

WDFW, Assessment of Salmonids and Their Habitat Conditions in the Walla Walla River Basin within Washington

TARGETED NON-ESU SPECIES

Species by Non-ESU	Notes
None	

Questions

#1: Give street address or road name and mile post for this worksite if available.

Highway 12 in Dixie crossing between Petty Bone Rd and Cochran Rd

Project Location

RELATED PROJECTS

Projects in PRISM

PRISM Number	Project Name	Program Name	Current Status	Relationship Type	Notes
No related project selected					

Related Project Notes

Questions

#1: Project location. Describe the geographic location, water bodies, and the location of the project in the watershed, i.e. nearshore, tributary, main-stem, off-channel, etc.

The proposed project addresses a barrier blocking passage to headwaters of Dry Creek, which runs north of the City of Walla Walla before flowing into the Walla Walla River.

#2: How does this project fit within your regional recovery plan and/or local lead entity's strategy to restore or protect salmonid habitat? Cite section and page number.

This project is one of the highest priority barrier outside of Mill Creek in the regional prioritization scoring by the Regional Technical Team for the Snake River Salmon Recovery Board. The project site is in the priority restoration reach of Dry Creek.

#3: Is this project part of a larger overall project?

No

#4: Is the project on State Owned Aquatic Lands? Please contact the Washington State Department of Natural Resources to make a determination. **Aquatic Districts and Managers**

Yes

Property Details

Property: Karin Cagle (Worksite #1: Dry Creek at Highway 12)

✓ **Planning**

LANDOWNER

Name	Karin Cagle
Address	10257 E HIGHWAY 12
City	Dixie
State	WA Zip 99329
Type	Private

CONTROL & TENURE

Instrument Type	Landowner Agreement
Timing	Proposed
Term Length	Fixed # of years
# Yrs	10
Expiration Date	09/01/2033
Note	

Project Proposal

Project Description

The Highway 12 bridge over Dry Creek in Dixie, WA presents an obstacle for the migration of mid-Columbia Summer Steelhead adults and juveniles. The bridge's concrete slab foundation spans the channel width creating a drop of 0.3m to 0.4m at the downstream end. This hinders fish passage at lower flows due to a lack of pool downstream and sheet flow over the concrete slab. This project will result in access to 20 miles of river, which includes the headwaters of the North Fork and South Fork of Dry Creek, providing increased access to spawning and rearing habitat for ESA-listed mid-Columbia Summer Steelhead. Collins Bridge Fish Barrier Removal (#15-1307, 2017) removed the last known fish barrier downstream of Highway 12 on Dry Creek. This project will correct the last know passage barrier on Dry Creek.

Project Questions

#1: Problem statement. What are the problems your project seeks to address? Include the source and scale of each problem. Describe the site, reach, and watershed conditions. Describe how those conditions impact salmon populations. Include current and historic factors important to understand the problems.

The bridge at Dry Creek and HWY 12 was constructed in 1969, is in good condition, and is not scheduled for replacement. There is a concrete sill that connects the 13.6m span in the stream creating the barrier ID 930791.
Summer Steelhead attempting to migrate during their seasonal movement encounter a drop height of 0.3 to 0.4 meters and sheet flow over the concrete sill preventing upstream passage. In late spring, low flow could strand juveniles preventing free movement.

#2: Describe the limiting factors, and/or ecological concerns, and limiting life stages (by fish species) that your project expects to address.

The immediate limiting factor is the barrier. This impacts adult and juvenile summer steelhead by restricting upstream passage. Fish barriers are considered imminent threats to salmonids and have the highest priority for restoration.

The Dry Creek spawning habitat begins at its confluence with the Walla Walla River and continues up-stream to the headwaters. The priority restoration reach in Dry Creek begins below at the Smith Road Bridge and continues up to it headwaters.

#3: What are the project goals? The goal of the project should be to solve identified problems by addressing the root causes. Then clearly state the desired future condition. Include which species and life stages will benefit from the outcome, and the time of year the benefits will be realized. **Example Goals and Objectives**

The ultimate goal of the project is to have the crossing of Highway 12 and Dry Creek configured so that target species Mid-Columbia Summer Steelhead have unimpeded access to 20 miles of spawning and rearing habitat upstream, without negative impacts to the bridge infrastructure.

#4: What are the project objectives? Objectives support and refine biological goals, breaking them down into smaller steps. Objectives are specific, quantifiable actions the project will complete to achieve the stated goal. Each objective should be SMART (Specific, Measurable, Achievable, Relevant, and Time-bound). **Example Goals and Objectives**

Objective 1: Complete survey, monitoring, and assessment information needed to complete design.
Objective 2: Develop alternatives/select preferred in consultation with Stakeholders
Objective 3: Complete conceptual design as defined in manual 18 on preferred alternative.
Objective 4: Complete preliminary design as defined in manual 18 ready for permitting

#5: Scope of work and deliverables. Provide a detailed description of each project task/element. With each task/element, identify who will be responsible for each, what the deliverables will be, and the schedule for completion.

This project will deliver a preliminary design for passage treatment for the barrier at crossing highway 12 and Dry Creek
Survey - Topographical survey
Assessments- structural assessment of channel and bridge
Develop Design Alternatives
Stakeholder process to select preferred alternative
Design - plan set and design report

#6: What are the assumptions and physical constraints that could impact whether you achieve your objectives? Assumptions and constrains are external conditions that are not under the direct control of the project, but directly impact the outcome of the project. These may include ecological and geomorphic factors, land use constraints, public acceptance of the project, delays, or other factors. How will you address these issues if they arise?

The crossing with HWY12 includes significant infrastructure with a state highway bridge. The structural importance of the sill under the bridge is yet to be determined. The bridge does support utility lines and potential water lines.

It is assumed that we will have continued landowner cooperation. The landowner has expressed support for the project.

#7: How have lessons learned from completed projects or monitoring studies informed this project?

Our process for this project will follow the process used for the Gose St Conceptual Design (21-1010). Stakeholders will be asked for design alternatives and included as part of the selection of the preferred alternative. Landowner engagement and transparency have been critical to the success of the Gose St project, and we would want to repeat that lesson learned here. Early engagement with permitting agencies as stakeholders is another lesson that we would repeat.

#8: Describe the alternatives considered and why the preferred was chosen.

There have been no alternatives have been proposed. The purpose of the project is to develop alternatives and select a preferred alternative.

#9: How were stakeholders consulted in the development of this project? Identify the stakeholders, their concerns or feedback, and how those concerns were addressed.

Stakeholders have been identified as CTUIR, WDFW, and WSDOT for technical input. We will continue to include the stakeholders for project review and check ins through out the project. The private landowner immediately downstream owns both sides of the creek, and will be included with all stakeholder communications.

#10: Does your project address or accommodate the anticipated effects of climate change?

Yes

#10a: How will your project be climate resilient given future conditions?

Climate change is increasing the likelihood of warmer air temperatures and more precipitation in the winter and reduced precipitation in the summer. The winter precipitation on Dry Creek headwaters will increasingly be rain instead of snow, changing peak flow timing and magnitude, exacerbating passage issues for the given target species attempting to move up Dry Creek.

#10b: How will your project increase habitat and species adaptability?

This project provides stream connectivity enabling juvenile movement upstream and downstream finding refugia as well as greater access to the upper reaches of Dry Creek where there is cold water spawning habitat.

#11: Describe the sponsor's experience managing this type of project. Describe other projects where the sponsor has successfully used a similar approach.

The sponsor has a long history in Walla Walla watershed with several completed SRFB projects. Including multiple design project on Mill Creek and Walla Walla River. All projects have utilized a similar management plan as the proposed Dry Creek Passage Design Project.

#12: Will veterans (including the veterans conservation corps) be involved in the project? If yes, please describe.

No

Planning Supplemental

#1: Is the project an assessment / inventory?
No

#2: Is your project a Barrier / Screening Diversion Inventory Project?
No

#3: Is this a fish passage design / screening design project?
Yes

#3a: List additional upstream and/or downstream fish passage barriers, if any. Identify current or future plans for correction.

This is the last identified barrier on Dry Creek.

#3b: Describe the amount and quality of habitat made accessible if the barrier is corrected. Include the Priority Index (PI), or Screening Priority Index (SPI), if applicable.

Based on the Snake River Barrier Priority Scoring List, correction of the Dry Creek barrier (PI #930791) will enable access to 19.9 miles of stream, the quality of habitat is average to greater then average for steelhead. The barrier ranks in the top ten priority for the region.

#3c: If you will be designing a culvert or arch to resolve the fish passage problem, what crossing design option will you use?
Other

#4: Will the project develop a design?
Yes

#4a: Will a licensed professional engineer design of the project?
Yes

#4b: Will you apply for permits as part of the project scope?

No

Planning Metrics

Worksite: Dry Creek at Highway 12 (#1)

Area Encompassed (acres) (B.0.b.1)	0.5
Miles of Stream and/or Shoreline Affected (B.0.b.2)	0.03

DESIGN FOR SALMON RESTORATION

Preliminary design (B.1.b.11.a RCO)

Total cost for Preliminary design	$119,800
Project Identified in a Plan or Watershed Assessment. (1220) (B.1.b.11.a)	Snake River Salmon Recovery Board Snake River Salmon Recovery Plan for SE Washington. Dayton, WA.
Priority in Recovery Plan (1222) (B.1.b.11.b)	National Marine Fisheries Service, 2009, Middle Columbia River Steelhead Distinct Population Segment ESA Recovery Plan, Portland, OR

CULTURAL RESOURCES

Cultural resources

Total cost for Cultural resources	$20,000

Acres surveyed for cultural resources	0.10

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Overall Project Metrics

COMPLETION DATE	
Projected date of completion	12/31/2025

Planning Cost Estimates

Worksite #1: Dry Creek at Highway 12

Category	Work Type	Estimated Cost	Note
Cultural Resources	Cultural resources	$20,000	
Design for Salmon restoration	Preliminary design (B.1.b.11.a RCO)	$119,800	
	Subtotal:	$139,800	
	Total Estimate For Worksite:	$139,800	

Summary

Total Estimated Costs:	$139,800
Total Estimated Planning Costs:	$139,800

Cost Summary

	Estimated Cost	Project %	Admin/AA&E %
Planning Costs			
Planning	$139,800		
SUBTOTAL	$139,800	100.00 %	
Total Cost Estimate	$139,800	100.00 %	

Funding Request and Match

FUNDING PROGRAM		
Salmon State Projects	$139,800	100.000000

SPONSOR MATCH

Questions

#1: Explain how you determined the cost estimates

The estimate is based off of cost from previously completed similar projects.

Cultural Resources

Cultural Resource Areas

Worksite #1: Dry Creek at Highway 12

Area: Dry Creek Highway 12 APE

#1: Describe any planned ground disturbing pre-construction/restoration work. This includes geo-technical investigation, fencing, demolition, decommissioning roads, etc.

There is no planned ground disturbances in this design project

#2: Describe the existing project area conditions. The description should include existing conditions, current and historic land uses and previous excavation/fill (if depths and extent is known, please describe).

The existing Bridge is adjacent to the project with no alterations proposed.

#3: Will a federal permit be required to complete the scope of work on the project areas located within this worksite?

No

#4: Are you utilizing Federal Funding to complete the scope of work? This includes funds that are being shown as match or not.

No

#5: Do you have knowledge of any previous cultural resource review within the project boundaries during the past 10 years?

No

#6: Are there any structures over 45 years of age within this worksite? This includes structures such as buildings, tidegates, dikes, residential structures, bridges, rail grades, park infrastructure, etc.

Yes

#6a: List the structure(s) and the properties that they are located within the project area. Identify which structures will be removed or altered as part of this proposal. Attach at least one photo of each structure. The photo must be labeled so that the structure may be geographically located within your project area.

The existing Bridge with no alterations proposed.

Project Permits

Permits and Reviews	Issuing Organization	Applied Date	Received Date	Expiration Date	Permit #
None - No permits Required					

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Attachments

Required Attachments	6 out of 6 done
Applicant Resolution/Authorizations	✓
Cost Estimate	✓
Landowner acknowledgement form	✓
Map: Planning Area	✓
Photo	✓
RCO Fiscal Data Collection Sheet	✓

PHOTOS (JPG, GIF)

Photos (JPG, GIF)

550543

PROJECT DOCUMENTS AND PHOTOS

Project Documents and Photos

File Type	Attach Date	Attachment Type	Title	Person	File Name, Number Associations	Shared
	04/14/2023	Cost Estimate	Dry Creek 930791 cost est.xlsx	MorganM	Dry Creek 930791 cost est.xlsx, 558204	✓
	03/03/2023	Barrier evaluation form	DryCreek- BEF -.docx	MorganM	DryCreek- BEF -.docx, 553795	✓
	03/03/2023	Landowner acknowledgement form	Signed Landowner Form.pdf	MorganM	Signed Landowner Form.pdf, 553791	
	03/03/2023	Applicant Resolution/Authorizations	DryCreek_ApplicantAuthorizationResolutic	MorganM	DryCreek_ApplicantAuthorizationRes… 553790	✓
	02/23/2023	RCO Fiscal Data Collection Sheet	FiscalDataCollectionSheet.pdf	MorganM	FiscalDataCollectionSheet.pdf, 552585	
	02/02/2023	Photo	Dry Creek HW12 Photo.jpeg	MorganM	Dry Creek HW12 Photo.jpeg, 550543	✓
	02/02/2023	Map: Planning Area	Maps Dry Creek HW12.pdf	MorganM	Maps Dry Creek HW12.pdf, 550541	✓

Application Status

Application Due Date: 06/27/2023

Status Name	Status Date	Submitted By	Submission Notes
Application Submitted	04/14/2023	Morgan Morris	
Preapplication	01/09/2023		

I certify that to the best of my knowledge, the information in this application is true and correct. Further, all application requirements due on the application due date have been fully completed to the best of my ability. I understand that if this application is found to be incomplete, it will be rejected by RCO. I understand that I may be required to submit additional documents before evaluation or approval of this project and I agree to provide them. (Morgan Morris, 04/14/2023)

Date of last change: 04/14/2023